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ART UNIT	PAPER NUMBER
2167	

DATE MAILED: 06/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.		Applicant(s)	
Office Action Summary	10/004,490		CHANDRASEKAR ET AL.	
	Examiner		Art Unit	
	Kuen S. Lu		2167	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE **3** MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 May 2006*.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,4,7-21,23-41 and 44-55* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,4,7-21,23-41 and 44-55* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1. The Action is responsive to Applicant's Amendment filed May 15, 2006.

2. Claims 1-2, 4, 7-21, 23-41 and 44-55 are pending in the application.

3. As to Applicant's Remarks, filed May 15, 2006, please see discussion in the section

Response to Arguments, following the Office Action for Final Rejection (hereafter "the

Action") as shown next. Please note in the Action, Examiner maintains the same

grounds for claims rejection, as set forth in the Office Action for non-Final Rejection of

February 6, 2006.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4.1. Claims 35-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Ortega et al. (U.S. Patent 6,401,084, hereafter "Ortega").

As per Claim 35, Ortega teaches the following:

"first displaying the auto-corrected query data set in the query input mechanism"
(See Fig. 4, element 94 and Col. 10, lines 33-51 wherein Ortega's preferably displaying
the search result performed by the modified search to the user is equivalent to the
Applicant's **first displaying the auto-corrected query data set in the query input
mechanism**); and

**"second displaying the search results based upon the auto-corrected query data
set"** (See Fig. 4, element 94 and Col. 10, lines 42-51 wherein Ortega's performing the
search with modified term and returning the search result for displaying at user's
computer is equivalent to the Applicant's **second displaying the search results based
upon the auto-corrected query data set**).

Ortega does not explicitly teach **"near the query input mechanism, third
displaying a link which enables the re-performance of the service, wherein the
link at least in part comprises of the entered query data set"**.

However, Ortega teaches combining separately positioned **Search Now** menu,
entered **Title** terms and link **Address** as a combined link for submitting to the server to
re-perform a search (See Fig. 2) and further teaches multiple displaying(s) and multiple
Underscored links in the window for allowing user to link different addresses.

It would have been obvious to one having ordinary skill in the art at the time of the
applicant's invention was made to modify the teaching of static **underscored** link to a
dynamic link by integrating some search elements into a text string for readying next
search because the combined teaching would have allowed user to directly and
conveniently perform multiple search methods, including Other Search Methods on the

same page and without the need of interacting with additional display or text entries of

window page.

Ortega further teaches the following:

"near the query input mechanism, third displaying a link which enables the re-performance of the service, wherein the link at least in part comprises of the entered query data set" (See Fig. 2 and Col. 10, lines 33-41 wherein Ortega's using

the internet page as link for transmitting between user computer and server, and

preferably displaying the search result page with option allowing user to revise the

query and re-attempt to query is equivalent to the Applicant's **near the query input**

mechanism, third displaying a link which enables the re-performance of the

service, wherein the link at least in part comprises of the entered query data set).

As per Claim 36, the combined teaching of Ortega further teaches the following:

"in response to an inputting of the link, fourth displaying the entered query data

set in the query input mechanism" (See Fig. 2 by using an internet page as a link to

input a query and at Fig. 4, element 94 and Col. 10, lines 33-41 wherein Ortega's

preferably displaying the query results page and the modified query, and the multiple

displaying teaching as previously described in claim 35 rejection is equivalent to the

Applicant's **in response to an inputting of the link, fourth displaying the entered**

query data set in the query input mechanism); and

"fifth displaying the search results based upon the entered query data set" (See

Fig. 4, element 94 and Col. 10, lines 33-41 wherein Ortega's preferably displaying the

query results page, and the multiple displaying teaching as previously described in claim 35 rejection is equivalent to the Applicant's **fifth displaying the search results based upon the entered query data set**).

As per Claim 37, the combined teaching of Ortega further teaches the following: **"in response to re-entering of the entered query data set to the query input mechanism, fourth displaying the entered query data set in the query input mechanism"** at Fig. 2 by using an internet page as a link to input a query and at Fig. 4, element 94 and Col. 10, lines 33-41 by preferably displaying the query results page and the modified query, and the multiple displaying teaching as previously described in claim 35 rejection is equivalent to the Applicant's **in response to re-entering of the entered query data set to the query input mechanism, fourth displaying the entered query data set in the query input mechanism**); and
"fifth displaying the search results based upon the entered query data set" at Fig. 4, element 94 and Col. 10, lines 33-41 by preferably displaying the query results page, and the multiple displaying teaching as previously described in claim 35 rejection is equivalent to the Applicant's **fifth displaying the search results based upon the entered query data set**).

As per Claim 38, the combined teaching of Ortega further teaches the following:

"computer readable medium having stored thereon a plurality of computer-executable instructions for performing the method of claim 35" (See

Fig. 1, element 34, the user's computer and Fig. 2, the computer-executable instructions in the form of web page, and the multiple displaying teaching as previously described in claim 35 rejection is equivalent to the Applicant's **computer readable medium having stored thereon a plurality of computer-executable instructions for performing the method of claim 35).**

As per Claim 39, the combined teaching of Ortega further teaches the following: **"data signal carrying computer executable instructions for performing the method of claim 35"** at Fig. 1, element 34, the user's computer and Fig. 2, the computer-executable instructions in the form of web page, and the multiple displaying teaching as previously described in claim 35 rejection is equivalent to the Applicant's **data signal carrying computer executable instructions for performing the method of claim 35).**

4.2. Claims 1-2, 4, 7-10, 13, 15-21, 23-26, 29, 31-34, 40-41, 44-47, 50 and 52-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ortega et al. (U.S. Patent 6,401,084, hereafter "Ortega") in view of Bowman et. al (U.S. Patent 6,006,225, hereafter "Bowman").

As per Claim 1, Ortega teaches the following: **"receiving from a client computing device original query entry data comprising at least one word"** (See Fig. 2 and Col. 4, lines 28-46 wherein Ortega's user submitting a

search query from the site by entering the fields on the search page is equivalent to the Applicant's **receiving from a client computing device original query entry data comprising at least one word**); and

"analyzing the spelling of the at least one word and determining", "whether at least one word has a mistake" (See Fig. 4, elements 72 and 76 and Col. 8, lines 41-56 wherein Ortega's query server determines whether the query includes both matching and non-matching terms and initiates spelling check process if it does, is equivalent to the Applicant's **analyzing the spelling of the at least one word and determining, ... , whether at least one word has a mistake**).

Ortega does not explicitly teach analyzing and determining "for each word" in the query, although the teaching strongly suggests analyzing and determining all words in the query term to differentiate matching and non-matching terms.

However, Bowman teaches for each term in a query, a selection process retrieves the respective related terms list from the correlation table (See col. 7, lines 24-27).

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention was made to combine Bowman reference into Ortega's by analyzing and determining spelling of text terms to each word level because both references are devoted to queries where Ortega mainly teaches spelling correction while Bowman focuses on suggesting alternative query terms, the combined teaching would have enabled a query and search system to consider all potentially important information entered by the users, provide users with higher relation value of alternative terms, and to make it possible of analyzing and determining query terms to each word

level for allowing user to quickly and efficiently locating the most relevant information

(See the references' BACKGROUND OF INVENTION).

The combined teaching of Bowman and Ortega references further teaches "**forming auto-corrected query entry data wherein said forming includes, for each word having a mistake, replacing the word having the mistake with an alternative word, if the alternative word satisfies at least one threshold confidence calculation**" (See Ortega: Fig. 4, elements 72-88 and Col. 9, line 48 - col. 10, line 17 wherein Ortega's executing a spelling comparison function to replace the non-matching term and evaluate its similarity score to determine for replacing the term for forming a modified query is equivalent to the Applicant's **forming auto-corrected query entry data wherein said forming includes, for each word having a mistake, replacing the word having the mistake with an alternative word, if the alternative word satisfies at least one threshold confidence calculation**).

As per Claim 19, Ortega teaches the following:

"**inputting to the query input mechanism of the client computing device original query entry data comprising at least one word**" (See Fig. 2 and Col. 4, lines 28-46 wherein Ortega's user submitting a search query from the site by entering the fields on the search page is equivalent to the Applicant's **inputting to the query input mechanism of the client computing device original query entry data comprising at least one word**);

"**transmitting said original query entry data to a server computing device**" (See

Fig. 1, elements 34, 32 and 38, and Col. 4, lines 4-27 wherein Ortega's user transmits

query string through the web page with fields filled by the user at the user's computer is

equivalent to the Applicant's **transmitting said original query entry data to a server**

computing device); and

"**receiving results from the performance of said service based on auto-corrected**

query entry data, wherein the forming of the auto-corrected query entry data in

connection with said performance includes" (See Fig. 4, element 94 and Col. 10,

lines 25-41 wherein Ortega's server performs auto-corrected query formed by executing

a program to modify the query is equivalent to the Applicant's **receiving results from**

the performance of said service based on auto-corrected query entry data,

wherein the forming of the auto-corrected query entry data in connection with

said performance includes); and

"**analyzing the spelling of the at least one word and determining**", "**whether at**

least one word has a mistake" (See Fig. 4, elements 72 and 76 and Col. 8, lines 41-56

wherein Ortega's query server determines whether the query includes both matching

and non-matching terms and initiates spelling check process if it does, is equivalent to

the Applicant's **analyzing the spelling of the at least one word and determining, ... ,**

whether at least one word has a mistake).

Ortega does not explicitly teach analyzing and determining "for each word" in the

query, although the teaching strongly suggests analyzing and determining all words in

the query term to differentiate matching and non-matching terms.

However, Bowman teaches for each term in a query, a selection process retrieves the respective related terms list from the correlation table (See col. 7, lines 24-27).

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention was made to combine Bowman reference into Ortega's by analyzing and determining spelling of text terms to each word level because both references are devoted to queries where Ortega mainly teaches spelling correction while Bowman focuses on suggesting alternative query terms, the combined teaching would have enabled a query and search system to consider all potentially important information entered by the users, provide users with higher relation value of alternative terms, and to make it possible of analyzing and determining query terms to each word level for allowing user to quickly and efficiently locating the most relevant information (See the references' BACKGROUND OF INVENTION).

The combined teaching of Bowman and Ortega references further teaches "**for each word having a mistake, replacing the word having the mistake with an alternative word, if the alternative word satisfies at least one threshold confidence calculation**" (See Ortega: Fig. 4, elements 58-88 and Col. 9, line 48 - col. 10, line 5 wherein Ortega's executing a spelling comparison function to replace the non-matching term and evaluate its similarity score to determine replacing the term for forming a modified query is equivalent to the Applicant's **for each word having a mistake, replacing the word having the mistake with an alternative word, if the alternative word satisfies at least one threshold confidence calculation**).

As per Claim 40, Ortega teaches the following:

"means for receiving from a client computing device original query entry data

comprising at least one word" (See Fig. 2 and Col. 4, lines 28-46 wherein Ortega's

user submits a search query from the site by entering the fields on the search page is

equivalent to the Applicant's **means for receiving from a client computing device**

original query entry data comprising at least one word); and

"means for analyzing the spelling of the at least one word and means for

determining", "whether at least one word has a mistake" (See Fig. 4, elements 72

and 76 and Col. 8, lines 41-56 wherein Ortega's query server determines whether the

query includes both matching and non-matching terms and initiates spelling check

process if it does, is equivalent to the Applicant's **means for analyzing the spelling of**

the at least one word and means for determining, ... , whether at least one word

has a mistake).

Ortega does not explicitly teach analyzing and determining "for each word" in the

query, although the teaching strongly suggests analyzing and determining all words in

the query term to differentiate matching and non-matching terms.

However, Bowman teaches for each term in a query, a selection process retrieves

the respective related terms list from the correlation table (See col. 7, lines 24-27).

It would have been obvious to one having ordinary skill in the art at the time of the

applicant's invention was made to combine Bowman reference into Ortega's by

analyzing and determining spelling of text terms to each word level because both

references are devoted to queries where Ortega mainly teaches spelling correction

while Bowman focuses on suggesting alternative query terms, the combined teaching

would have enabled a query and search system to consider all potentially important

information entered by the users, provide users with higher relation value of alternative

terms, and to make it possible of analyzing and determining query terms to each word

level for allowing user to quickly and efficiently locating the most relevant information

(See the references' BACKGROUND OF INVENTION).

The combined teaching of Bowman and Ortega references further teaches the

following:

"means for generating auto-corrected query entry data if according to at least one

threshold confidence calculation, the auto-corrected query entry data corrects at

least one mistake in the original query entry data" (See Ortega: Fig. 4, elements 58-

88 and Col. 9, line 48 - col. 10, line 5 wherein Ortega's executing a spelling comparison

function to replace the non-matching term and evaluate its similarity score to determine

replacing the term for forming a modified query is equivalent to the Applicant's **means**

for generating auto-corrected query entry data if according to at least one

threshold confidence calculation, the auto-corrected query entry data corrects at

least one mistake in the original query entry data); and

"means for performing said network service automatically replacing said original

query entry data with said auto-corrected query entry data" (See Ortega: Fig. 1,

elements 34, 32 and 38 by showing the network architecture of the service, and at Fig.

4, elements 86, 88 and 94, and Col. 9, line 64 - col. 10, line 5 wherein Ortega's

executing a program for automatically modifying the query by replacing the non-

matching term based on similarity scoring mechanism is equivalent to the Applicant's **means for performing said network service automatically replacing said original query entry data with said auto-corrected query entry data**).

As per Claim 2, the combined teaching of Bowman and Ortega references further teaches before receiving, **"query entry data is input to the client computing device in the query input mechanism of the service"** (See Ortega: Fig. 1, element 34 and Col. 4, lines 4-12 wherein Ortega's user submits query for search from the user computer and the query is received by web server from the internet is equivalent to the Applicant's **query entry data is input to the client computing device in the query input mechanism of the service**).

As per claims 53 and 55, the combined teaching of Bowman and Ortega references further teaches the following:

"performing the service utilizing the auto-corrected query entry data instead of the original query entry data" (See Ortega: col. 4, lines 37-46 and col. 5, lines 36-43 wherein Ortega's user is presented with modified items to select, including the hyper textual links, to select the result pages is equivalent to the Applicant's **performing the service utilizing the auto-corrected query entry data instead of the original query entry data**);

"sending the results of performing the service with the auto-corrected query entry data to the client computing device for display" (See Ortega: Fig. 4, elements 72-74 wherein

Ortega's list of result items are returned to user when items found is equivalent to the Applicant's **performing the service utilizing the auto-corrected query entry data instead of the original query entry data**); and

"transmitting link data to the client computing device for displaying a link on the client computing device, which link, if input by the user, re-performs the service with the original query entry data instead of the auto-corrected query entry data" (See Ortega: col. 4, lines 37-46 and col. 5, lines 36-43 wherein Ortega's user is presented with modified items to select or enters a new search, including the original term, to perform the search is equivalent to the Applicant's **transmitting link data to the client computing device for displaying a link on the client computing device, which link, if input by the user, re-performs the service with the original query entry data instead of the auto-corrected query entry data).**

As per claim 54, the combined teaching of Bowman and Ortega references further teaches **"displaying on the client computing device a link, which link, if input by the user, re-performs the service with the original query entry data instead of the auto-corrected query entry data"** (See Ortega: col. 4, lines 37-46 and col. 5, lines 36-43 wherein Ortega's user is presented with modified items to select, including the hyper textual links, or enters a new search, including the original term, to perform the search is equivalent to the Applicant's **displaying on the client computing device a link, which link, if input by the user, re-performs the service with the original query entry data instead of the auto-corrected query entry data).**

As per Claims 4, 20 and 41, the combined teaching of Bowman and Ortega

references further teaches "**the service is a search engine, and said performing**

includes returning search results based upon said auto-corrected query entry

data" (See Ortega: Fig. 4, element 94 and Col. 10, lines 42-51 wherein Ortega's

performing the search with modified term and returning the search result is equivalent to

the Applicant's **the service is a search engine, and said performing includes**

returning search results based upon said auto-corrected query entry data).

As per Claims 7, 23 and 44, the combined teaching of Bowman and Ortega

references further teaches "**updating at least one confidence score associated with**

at least one replaced word of the auto-corrected query entry data to reflect that

the user is dissatisfied with the auto-corrected query entry data" (See Ortega: Col.

9, lines 33-47 and Col. 10, lines 6-11 wherein Ortega's halting step 3 for adjusting the

result and updating similarity score of the replacing term in the auto modified query is

equivalent to the Applicant's **updating at least one confidence score associated with**

at least one replaced word of the auto-corrected query entry data to reflect that

the user is dissatisfied with the auto-corrected query entry data).

As per Claims 8, 24 and 45, the combined teaching of Bowman and Ortega

references further teaches "**including receiving again from the client computing**

device the original query entry data; and performing the service utilizing the

appear in the dictionary and identifying the non-dictionary terms is equivalent to the

Applicant's **determining whether at least one word has a mistake includes**

determining whether the at least one word is in a unified dictionary).

As per Claims 13, 29 and 50, the combined teaching of Bowman and Ortega

references further teaches the following:

"**for each word having a mistake, discovering at least one alternative word that is**

a nearest neighbor to the word having the mistake" (See Ortega: Col. 2, lines 21-34

wherein Ortega's finding a related term with a sufficiently similar spelling to a non-

matching term, the non-matching term is preferably replaced with the related term is

equivalent to the Applicant's **for each word having a mistake, discovering at least**

one alternative word that is a nearest neighbor to the word having the mistake);

"**calculating a confidence score for each of said at least one alternative word,**

wherein the confidence score is a relative measure of a likelihood that the

alternative word is the word without the mistake" (See Ortega: Col. 8, line 66 - col.

9, line 10 and col. 9, lines 48-52 wherein Ortega's scoring the similarity scores of non-

matching term against each of the related terms is equivalent to the Applicant's); and

"determining whether any of the at least one alternative words has a confidence score

that exceeds a first threshold" (See Ortega: Col. 9, line 64 - col. 10, line 5 wherein

Ortega's evaluating the similarity score to determine if the related terms passes the

similar test to the non-matching term by measuring if its score is within the similarity

threshold is equivalent to the Applicant's **calculating a confidence score for each of**

original query entry data instead of the auto-corrected query entry data" (See Ortega: Fig. 2, Col. 4, lines 28-46and Col. 10, lines 33-36 wherein Ortega's user rejects the search term replacement and revising the query, and submitting a search query from the site is equivalent to the Applicant's **including receiving again from the client computing device the original query entry data; and performing the service utilizing the original query entry data instead of the auto-corrected query entry data**).

As per Claims 9, 25 and 46, the combined teaching of Bowman and Ortega references further teaches "**updating at least one confidence score associated with at least one replaced word of the auto-corrected query entry data to reflect that the user is dissatisfied with the auto-corrected query entry data**" (See Ortega: Col. 9, lines 33-47 and Col. 10, lines 6-11 wherein Ortega's halting step 3 for adjusting the result and updating similarity score of the replacing term in the auto modified query is equivalent to the Applicant's **updating at least one confidence score associated with at least one replaced word of the auto-corrected query entry data to reflect that the user is dissatisfied with the auto-corrected query entry data**)

As per Claims 10, 26 and 47, the combined teaching of Bowman and Ortega references further teaches "**determining whether at least one word has a mistake includes determining whether the at least one word is in a unified dictionary**" (See Ortega: Col. 7, lines 25-41 wherein Ortega's correcting misspellings of terms that do not

said at least one alternative word, wherein the confidence score is a relative

measure of a likelihood that the alternative word is the word without the mistake).

As per Claims 15, 31 and 52, the combined teaching of Bowman and Ortega

references further teaches "if there is only one alternative word that is a nearest

neighbor to the word having the mistake, and if the confidence score for the one

alternative word exceeds the first threshold, replacing the word having the

mistake with the alternative word" (See Ortega: Fig. 4, elements 86 and 88 and Col.

9, line 64 - col. 10, line 5 wherein Ortega's selecting the replacing term from the related

terms with the most similarity score to the non-matching term is equivalent to the

Applicant's if there is only one alternative word that is a nearest neighbor to the

word having the mistake, and if the confidence score for the one alternative word

exceeds the first threshold, replacing the word having the mistake with the

alternative word).

As per Claims 16 and 32, the combined teaching of Bowman and Ortega references

further teaches "computer readable medium having stored thereon a plurality of

computer-executable instructions for performing the method of claim 1" (See

Ortega: Fig. 1, element 34, the user's computer and Fig. 2, wherein Ortega's computer-

executable instructions in the form of web page is equivalent to the Applicant's

computer readable medium having stored thereon a plurality of

computer-executable instructions for performing the method of claim 1).

As per Claims 17 and 33, the combined teaching of Bowman and Ortega references further teaches "**data signal carrying computer executable instructions for performing the method of claim 1**" (See Ortega: Fig. 1, element 34, the user's computer and Fig. 2, wherein Ortega's computer-executable instructions in the form of web page is equivalent to the Applicant's **data signal carrying computer executable instructions for performing the method of claim 1**).

As per Claims 18 and 34, the combined teaching of Bowman and Ortega references further teaches "**device comprising means for performing the method of claim 1**" (See Ortega: Fig. 1, element 34, wherein Ortega's user computer and Fig. 2, the computer-executable instructions in the form of web page is equivalent to the Applicant's **device comprising means for performing the method of claim 1**).

As per Claim 21, the combined teaching of Bowman and Ortega references further teaches "**sending the results of performing the service with the auto-corrected query entry data to the client computing device for display**" (See Ortega: Fig. 4, element 94 and Col. 10, lines 33-51 wherein Ortega's preferably displaying the search result performed by the modified search to the user is equivalent to the Applicant's **sending the results of performing the service with the auto-corrected query entry data to the client computing device for display**).

4.3. Claims 11, 27 and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ortega et al. (U.S. Patent 6,401,084, hereafter "Ortega") in view of Bowman et. al (U.S. Patent 6,006,225, hereafter "Bowman"), as applied to Claims 1, 10, 19, 26, 40 and 47 above, and further in view of Brill et al. (U.S. Publication 2003/0037077, hereafter "Brill").

As per Claims 11, 27 and 48, the combined teaching of Ortega and Bowman references teaches determining if at least one word has a mistake and where the at least one word in a dictionary as previously described in Claims 1, 10, 19, 26, 40 and 47 rejection.

The combined teaching of Ortega and Bowman references does not explicitly teach **"dynamically updating said unified dictionary, wherein said updating includes aggregating a plurality of data stores, with said plurality of data stores including at least one dynamically updated data store".**

However, Brill teaches **"dynamically updating said unified dictionary, wherein said updating includes aggregating a plurality of data stores, with said plurality of data stores including at least one dynamically updated data store"** by updating dictionary, including single and strings of words by dynamically and frequently adding them to the dictionary at Col. 2, lines 21-34.

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention was made to combine Brill's teaching with Bowman and Ortega references by implementing a compact, dynamic dictionary such that missing or

corrected words could be frequently added because by doing so the spelling correction would have been more effective due to the compact size and the dictionary would be more flexible to use because its content is dynamic and update-able.

4.4. Claims 12, 28 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ortega et al. (U.S. Patent 6,401,084, hereafter "Ortega") in view of Bowman et. al (U.S. Patent 6,006,225, hereafter "Bowman"), as applied to Claims 1, 10, 19, 26, 40 and 47 above, and further in view of Harris (U.S. Publication 2002/0059204).

As per Claims 12, 28 and 49, wherein the combined teaching of Bowman and Ortega references teaches determining if at least one word has a mistake and where the at least one word in a dictionary as previously described in claims 10, 26 and 47 rejections.

The combined teaching of Bowman and Ortega references does not explictly teach **"unified dictionary is formed from a plurality data sources including a Web-specific lexicon".**

However, Harris teaches **"unified dictionary is formed from a plurality data sources including a Web-specific lexicon"** by searching of a plurality of data sources which includes text documents such as web pages that can include program instructions, and other types of text documents, text files, and database, although other data sources can be included at Col. 1, line 66 - col. 2, line 11.

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention was made to combine Harris' teaching with Bowman and Ortega references by Implementing a distributed search engine having dictionary consisting of a plurality of data sources, including web-specific data because by doing so the customized dictionaries could customize the query to produce a customized query result.

4.5. Claims 14, 30 and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ortega et al. (U.S. Patent 6,401,084, hereafter "Ortega") in view of Bowman et. al (U.S. Patent 6,006,225, hereafter "Bowman"), as applied to Claims 1, 13, 19, 29, 40 and 50 above, and further in view of Hoashi et al. (U.S. Publication 2001/0032204).

As per Claims 14, 30 and 51, wherein the combined teaching of Bowman and Ortega references teaches "**if any of the at least one alternative words has a confidence score that exceeds the first threshold, determining for the two alternative words of the at least one alternative words having the highest confidence scores**" and "**...replacing the word having the mistake with the alternative word having the highest confidence score**" (See Ortega: Col. 9, lines 48-52 where similarity threshold is utilized to determine if related terms are similar enough to a non-matching term and where five related terms score differently on the similarity test against the non-matching term and selecting the term with the lowest score as the most similar term for the replacement.

The combined teaching of Bowman and Ortega references does not explicitly teach **"whether the difference between the two confidence scores is greater than a second threshold; and if the difference is greater than the second threshold, replacing the word having the mistake with the alternative word having the highest confidence score"**.

However, Hoashi teaches **"whether the difference between the two confidence scores is greater than a second threshold; and if the difference is greater than the second threshold, replacing the word having the mistake with the alternative word having the highest confidence score"** at Figs. 5-6, step 13 and Page 5, [0069] by defining the first threshold value as the similarities of a set of documents matching the user's relevant profile and the second threshold value as the similarities of a set of documents matching the user's non-relevant profile.

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention was made to combine Hoashi's teaching with Bowman and Ortega references by implementing the second threshold test using the difference of the two most similar terms' similarity scores against a preset value because by doing so the selection of replacing terms from the most similar ones could be further scrutinized.

Response to Arguments

5. The Applicant's arguments filed on May 15, 2006 has been fully considered, please see discussions below.

a). At Page 11, concerning 35 U.S.C. § 112, second paragraph rejection of claim 35, Applicant argued that the subject matter of "near the input mechanism, third

displaying..." is definite, in view of Specification and Fig. 5A wherein link element 520A

is closely located to element 510A.

Examiner considers the above argument **a)** valid and persuasive, and the rejection is

hereby withdrawn.

b). At Page 12, concerning claims 1, 19 and 40, the Applicant further argued that the

Ortega reference fails to teach "analyzing the spelling ... and determining, for each

word, whether the ... word has a mistake" because the reference leverages the already

corrected spelling of one term to obtain another term.

As to the above argument **b)**, the Examiner respectfully submits that the combined

teaching of Bowman and Ortega references does teach the element as described

grounds set forth in the Office Action, and Examiner further points out that Ortega

utilizes a spell correction process to attempt to correct the spelling of the non-matching

term(s), (Please see col. 4, lines 62-67). Please note the non-matching term(s) needs

to be spelling corrected.

c). At Pages 12-13, concerning claim 35, Applicant continued to argue that the Ortega

reference does not teach "wherein the link at least in part comprises of the entered

query data set".

As to the above argument **c)**, the Examiner respectfully submits that in terms of the

element "**... wherein the link at least in part comprises of the entered query data

set**", Applicant may intend to have (part of) the entered query data set be actually

displayed in the link field. However, what explicitly claimed in the element does not require the display of (part of) the entered query set. For rejecting this element, Examiner utilized Fig. 2, including all elements cited, as a whole under 35 U.S.C. § 103(a). Please note, as Ortega teaches in Fig. 2, the cited "**Search Now**" menu, a link, by self also teaches the subject matter. It is noted when the link is clicked, the link does comprise of the query entered in the **Author** entry field. Here Examiner does not interpret the link required to be a hyper link.

Conclusion

6. The prior art made of record

    A. U.S. Patent   6,401,084

    B. U.S. Publication 2003/0037077

    C. U.S. Publication 2002/0059204

    D. U.S. Publication 2001/0032204

    I. U.S. Patent   6,006,225

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

    E. U.S. Publication 2003/0069877

    F. U.S. Publication 2002/0152204

    G. U.S. Publication 2002/0194229

    H. U.S. Publication 2003/0084041

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this

Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and

any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing

date of the advisory action. In no event, however, will the statutory period for reply

expire later than SIX MONTHS from the date of this final action.

Contact information

8. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Kuen S Lu whose telephone number is (571) 272-

4114. The examiner can normally be reached on Monday-Friday (8:00 am-5:00 pm).

If attempts to reach the examiner by telephone pre unsuccessful, the examiner's

supervisor, John Cottingham can be reached on 571-272-7079. The fax phone number

for the organization where this application or proceeding is assigned is 571-272-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for Page 13

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 886-217-9197 (toll-free)..

Kuen S. Lu/

Patent Examiner

June 19, 2006